

land, which is generally of a clay formation, rises gently from the Bay towards the interior on all sides. The temperature varies very little from that of the St. Lawrence Valley below Quebec. The Meteorological Department report the average temperature for the last three years to be about 6 degrees warmer than that of Rimouski.

### MINERALS.

Dr. Bell estimates that the Huronian formation of this region is most promising, as regards minerals, especially gold, copper, iron and nickel. Veins have been found in several localities showing traces of copper and others of gold. Mr. A. P. Low says that at Lake Chibougamau copper has been found and that the granites of Lake Ouanagomai must contain gold.

Lignite coal has also been found by Dr. Bell in considerable quantities on several of the islands in Hudson Bay.

### PROVINCE OF ONTARIO.

From information derived from surveys made by the Provincial Government in 1900,

From Mile 375 to Mile 417, or from the western boundary of the Province of Quebec to 72 miles westwards.

A large portion of this region is of the same general character and equally well suited for agricultural settlement as the townships around the head of Lake Temiscaming. The land is clay and clay loam. In general the land back from the rivers is low lying and marshy, and the impervious nature of the soil prevents filtration and promotes the growth of moss with which most of the country is covered. Nevertheless, the soil is rich and capable of cultivation with proper drainage. The land tributary to the Trans-Canada Railway on this portion, which is, or could be made suitable for farming, is estimated at one million acres. The country along the Blanche River above Lake Temiscaming and extending to Lake Abitibi, is a fine rolling area of clay loam. There are extensive deposits of moss peat, some of the bogs reaching to a depth of ten feet. The peat taken from these bogs, on analysis, shows a high percentage of volatile combustible matter and fixed carbon, no sulphur and only a trace of phosphorus, with a low percentage of moisture and ash, which render it a valuable fuel.

There are two water powers of considerable magnitude on Abitibi River, Conchiching Falls, with about 6,000 H.P. and Iroquois Falls, with about half that amount. Upper Abitibi Lake covers an area of 190 square miles, of which about 55 square miles lie in the Province of Quebec. Lower Abitibi Lake has a surface of 145 square miles. A comparatively small expenditure in lowering the level of Conchiching Falls would reduce those lakes to about one half their present area and improve the drainage of an immense tract of country.

There is little pine timber north of the height of land, the trees being scattered and inferior in quality. There are some small areas of red pine and some jack pine, but nearly all the varieties found are south of Lake Abitibi. The best areas for pulp wood are on Low Bush and Circle Rivers between the Upper and Lower Abitibi Lakes. There are also considerable oak wood areas to the west and north of Lower Abitibi Lake.



COTTAGE HOSPITAL FOR SICK AND AGED INDIANS, MOOSE FACTORY.

From Mile 417 to Mile 557, a distance of 100 miles.

75 per cent of the land in this distance is found to be choice farming land, the surface, in places, rolling, and the soil a rich friable clay and clay loam. The good land alternates with marshy land not more than four feet deep with clay at the bottom. If the country were cleared up a large proportion of this low wet land could be made productive as pasture.

The prevailing timber is spruce and poplar, there being no pine or hard wood. The spruce, especially along the river banks, attains a size which renders it valuable for square timber, and the poplar is large and abundant, particularly on the Mattagami River. Special acres examined would yield 20 cords of spruce, other acres would yield 15 cords of spruce and ten of poplar. Some of them, if all the timber growing on them were made into cord wood, would show fit to 70 cords to the acre. Much of the tamarac is dead, as this tree appears to frequently die after having obtained a growth of about twenty inches, and owing to the slight hold of its roots on the clay soil it is liable to be blown down. The district is generally flat with a gradual slope towards Hudson Bay.

Rock exposures are few and of limited area, the prevailing formation being the Laurentian with isolated outcrops of the Huronian formation. In some localities iron pyrites are found which may be utilized in the manufacture of chemical pulp. The country presents excellent facilities for railway construction. On the north side of the height of land no rock cutting is necessary, very little cutting and filling would be required and, owing to the level nature of most of the country, the gradient would be easy. Tamarac for ties and sand ballast are to be had in abundance. The rivers and streams, more especially the Mattagami and Kapuskasing Rivers furnish numerous valuable water powers with falls from ten to twenty-five feet, which can be utilized in the development of mechanical industry.

Generally speaking the climate is similar to that of Manitoba, the weather in mid-summer being equally hot. No destructive frosts are experienced until the end of September, and rains are frequent, but not excessive.

Between the Missinabie and Kaminakagnini Rivers, from Mile 557 to Mile 637, a distance of 80 miles, the land, as a whole, is level, rising slightly along the water courses, where it is rolling. The soil is clay and sandy loam, covered in the lower levels with boggy peat and moss, varying from two to four feet in depth. The country can be easily cleared, and for farming purposes the soil will be equal to the best in the older portions of the Province. Much of the area which is at present swampy, will receive natural drainage when the country is cleared